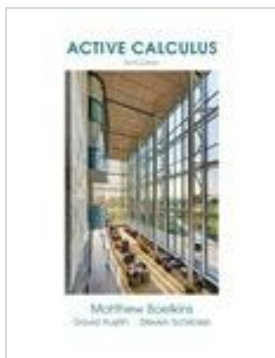# Faculty Review of Open eTextbooks

The California Open Educational Resources Council has designed and implemented a faculty review process of the free and open etextbooks showcased within the California Open Online Library for Education (www.cool4ed.org). Faculty from the California Community Colleges, the California State University, and the University of California were invited to review the selected free and open etextboks using a rubric. Faculty received a stipend for their efforts and funding was provided by the State of California, the William and Flora Hewlett Foundation, and the Bill and Melinda Gates Foundation.

Textbook Name:

Active Calculus

License:

Find it: eTextbook Website

Textbook Authors:

Matt Boelkins, David Austin, and Steve Schlicker

Reviewed by:

Jeff Silverman

Institution:

California State University, Sonoma
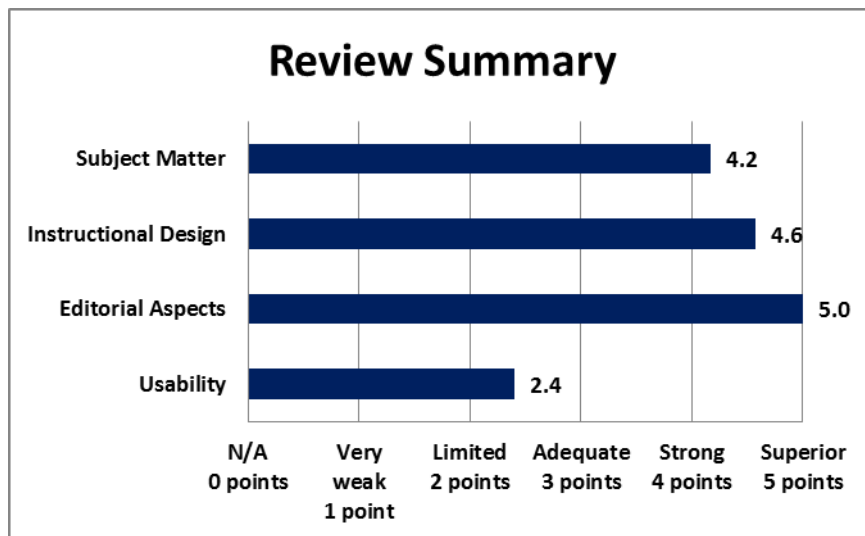
Title/Position:

Professor

Format Reviewed:

Online

A small fee may be associated with various formats.

Review Summary

Category	Rating
Subject Matter	4.2
Instructional Design	4.6
Editorial Aspects	5.0
Usability	2.4

N/A 0 points | Very weak 1 point | Limited 2 points | Adequate 3 points | Strong 4 points | Superior 5 points

Date Reviewed:

December 2015

California OER Council eTextbook Evaluation Rubric

CA Course ID: MATH 210

Subject Matter (30 possible points)	N/A (0 pts)	Very Weak (1pt)	Limited (2 pts)	Adequate (3pts)	Strong (4 pts)	Superior (5 pts)
Is the content accurate, error-free, and unbiased?						X
Does the text adequately cover the designated course with a sufficient degree of depth and scope?						X
Does the textbook use sufficient and relevant examples to present its subject matter?						X

	N/A (0 pts)	Very Weak (1pt)	Limited (2 pts)	Adequate (3pts)	Strong (4 pts)	Superior (5 pts)
Does the textbook use a clear, consistent terminology to present its subject matter?						X
Does the textbook reflect current knowledge of the subject matter?						X
Does the textbook present its subject matter in a culturally sensitive manner? (e.g. Is the textbook free of offensive and insensitive examples? Does it include examples that are inclusive of a variety of races, ethnicities, and backgrounds?)	X					

Total Points: 25 out of 30

Please provide comments on any aspect of the subject matter of this textbook:

- The java applets provide a very nice visual perspective of the concepts under discussion.
- Many of the examples are the examples one typically encounters in a standard calculus text, however, this text also has examples that are atypical.
- It would be nice if the textbook included some multivariable calculus since my department includes topics from multivariable calculus in the second semester calculus course.
- There are no test banks included with the text. It would be nice if the text included end of chapter review tests for the students. Self-testing is an important of the learning process.

Instructional Design (35 possible points)	N/A (0 pts)	Very Weak (1pt)	Limited (2 pts)	Adequate (3pts)	Strong (4 pts)	Superior (5 pts)
Does the textbook present its subject materials at appropriate reading levels for undergrad use?						X
Does the textbook reflect a consideration of different learning styles? (e.g. visual, textual?)						X
Does the textbook present explicit learning outcomes aligned with the course and curriculum?						X
Is a coherent organization of the textbook evident to the reader/student?						X
Does the textbook reflect best practices in the instruction of the designated course?						X
Does the textbook contain sufficient effective ancillary materials? (e.g. test banks, individual and/or group activities or exercises, pedagogical apparatus, etc.)				X		
Is the textbook searchable?					X	

Total Points: 32 out of 35

Please provide comments on any aspect of the instructional design of this textbook:

- Each section contains a collection of activities (which can be used as group activities). At the end of each section there are exercises (with multiple parts) based on the activities. The textbook does not contain the routine calculus exercises (which I find refreshing). Instead of including the routine exercises, the authors include 4 more interesting exercises and refer the reader to the Strang Calculus text or Webworks for the routine exercises. In addition, the numerous links to java applets provide demonstrations of key concepts.

Editorial Aspects (25 possible points)	N/A (0 pts)	Very Weak (1pt)	Limited (2 pts)	Adequate (3pts)	Strong (4 pts)	Superior (5 pts)
Is the language of the textbook free of grammatical, spelling, usage, and typographical errors?						X
Is the textbook written in a clear, engaging style?						X
Does the textbook adhere to effective principles of design? (e.g. are pages latid0out and organized to be clear and visually engaging and effective? Are colors, font, and typography consistent and unified?)						X
Does the textbook include conventional editorial features? (e.g. a table of contents, glossary, citations and further references)						X
How effective are multimedia elements of the textbook? (e.g. graphics, animations, audio)						X

Total Points: 25 out of 25

Please provide comments on any editorial aspect of this textbook.

- The table of contents provides links to each topic as does the index.

- The java applets provide animation and most of the graphics are in color.
- The introduction to each section provides motivation for the topic to be discussed.
- The end of each section concludes with a summary of the of the topic discussed in the section.

Usability (25 possible points)	N/A (0 pts)	Very Weak (1pt)	Limited (2 pts)	Adequate (3pts)	Strong (4 pts)	Superior (5 pts)
Is the textbook compatible with standard and commonly available hardware/software in college/university campus student computer labs?	X					
Is the textbook accessible in a variety of different electronic formats? (e.g. .txt, .pdf, .epub, etc.)		X				
Can the textbook be printed easily?					X	
Does the user interface implicitly inform the reader how to interact with and navigate the textbook?					X	
How easily can the textbook be annotated by students and instructors?		X				

Total Points: 12 out of 25

Please provide comments on any aspect of access concerning this textbook.
- As far as I know, the textbook is only accessible in pdf format. Students will find the text easy to navigate. The only difficulty I encountered was that some of my plugins needed to be updated in order to use the applets.

Overall Ratings						
	Not at all (0 pts)	Very Weak (1 pt)	Limited (2 pts)	Adequate (3 pts)	Strong (4 pts)	Superior (5 pts)
What is your overall impression of the textbook?						X
	Not at all (0 pts)	Strong reservations (1 pt)	Limited willingness (2 pts)	Willing (3 pts)	Strongly willing (4 pts)	Enthusiastically willing (5 pts)
How willing would you be to adopt this book?					X	

Total Points: 9 out of 10

Overall Comments

If you were to recommend this textbook to colleagues, what merits of the textbook would you highlight?
- I would definitely recommend this textbook. It has interesting problems, most of which can be used for group activities. It is written in a way that is very accessible for students. The summary at the end of each section is a very nice addition.

What areas of this textbook require improvement in order for it to be used in your courses?
- My suggestions for improvement are the following:
  - More applets.
  - Some sort of chapter review test that students can take to test their understanding of the material in the chapter.

We invite you to add your feedback on the textbook or the review to the textbook site in MERLOT
(Please register in MERLOT to post your feedback.)

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For questions or more information, contact the CA Open Educational Resources Council.